Inventor: Richard M. Ehrlich Docket No.: PANA-01046USD

1/17

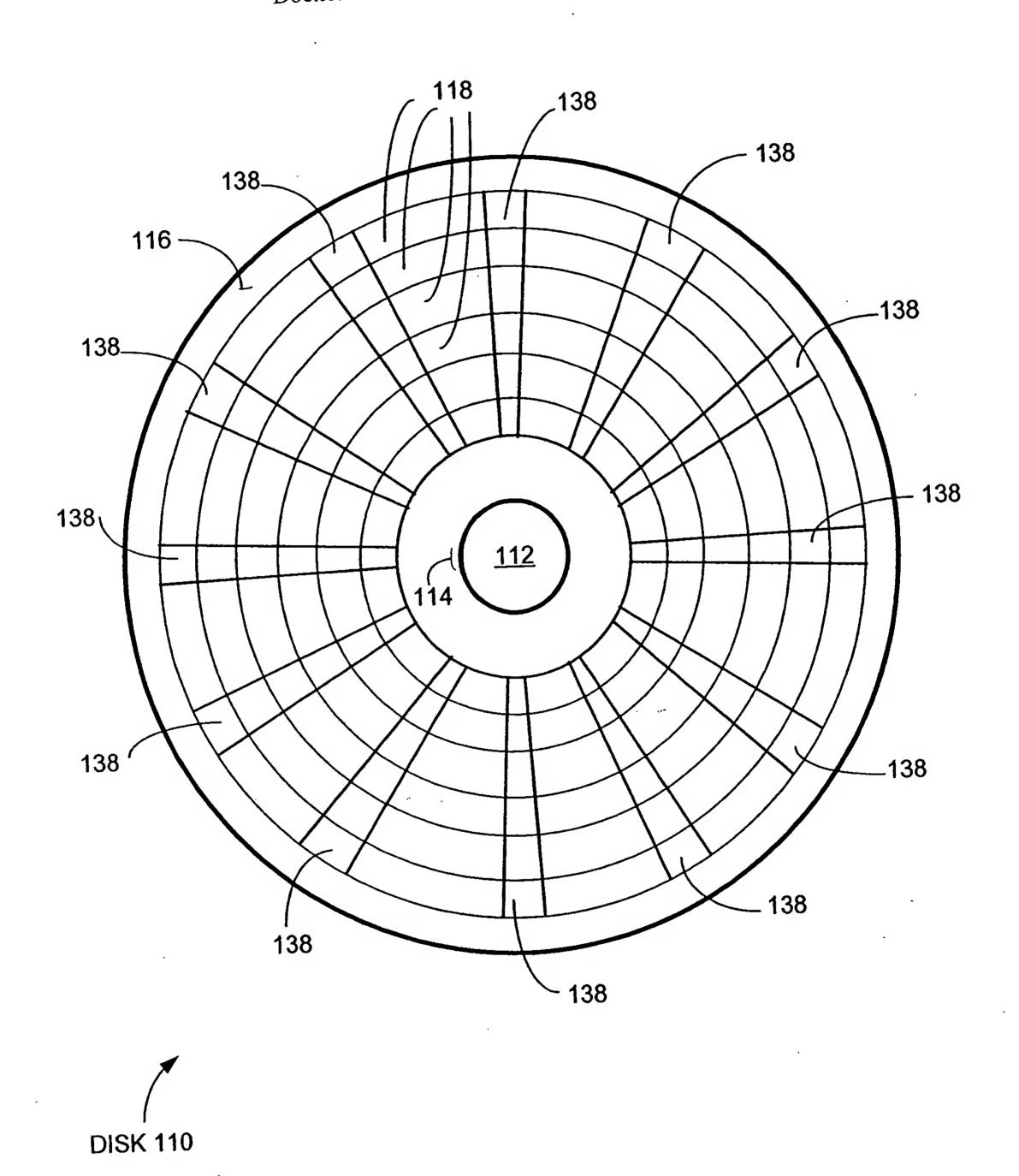
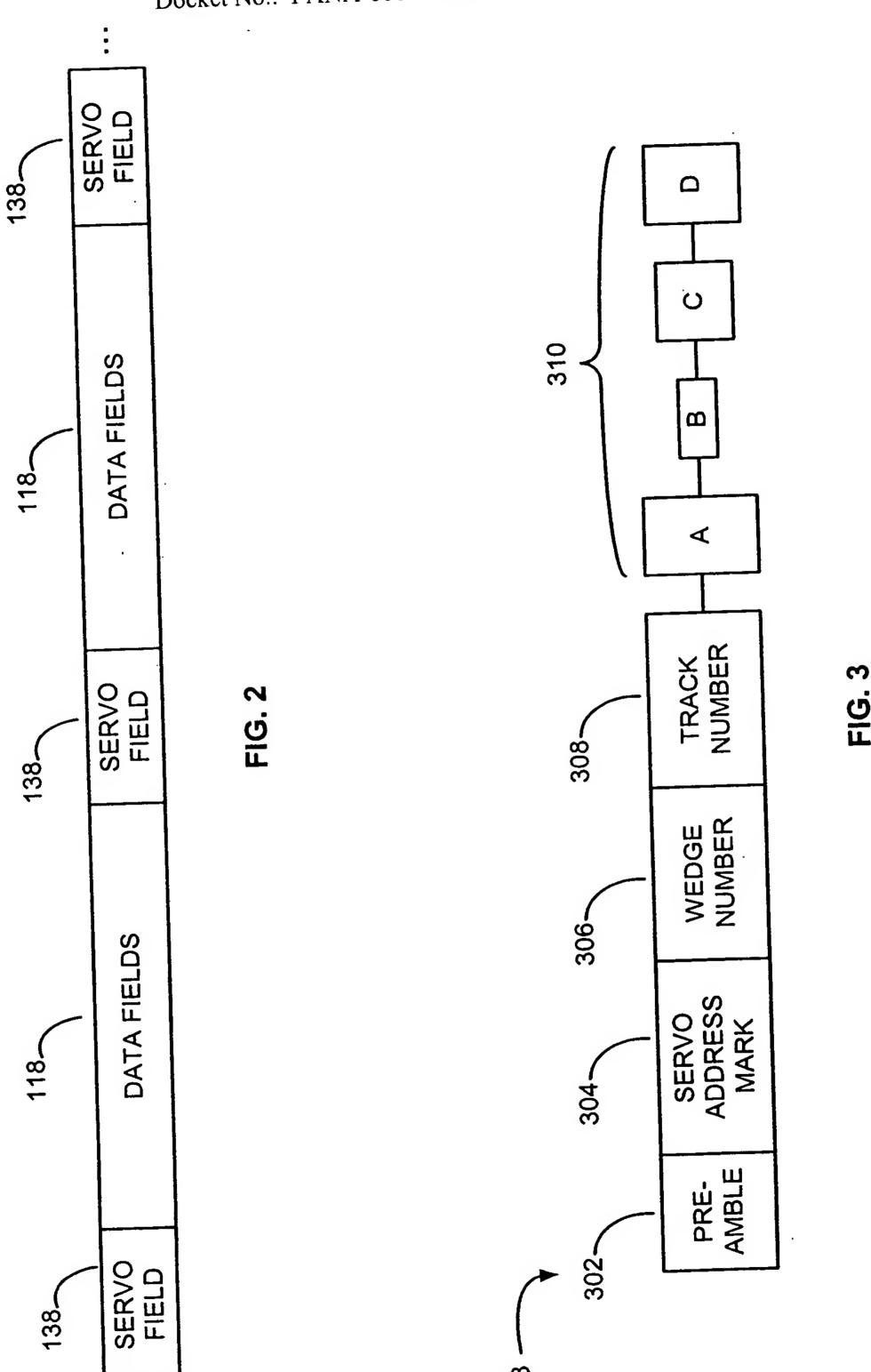
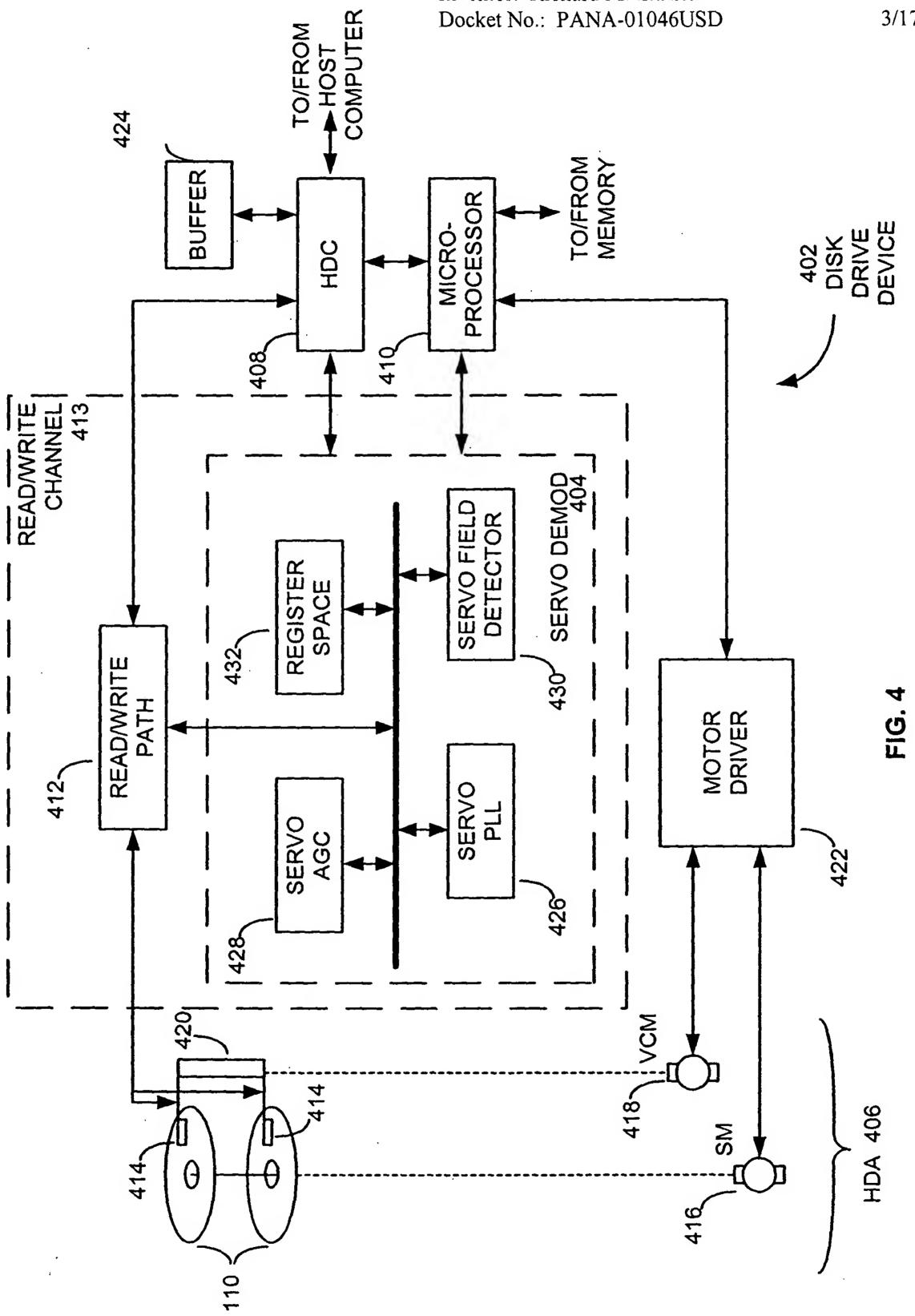


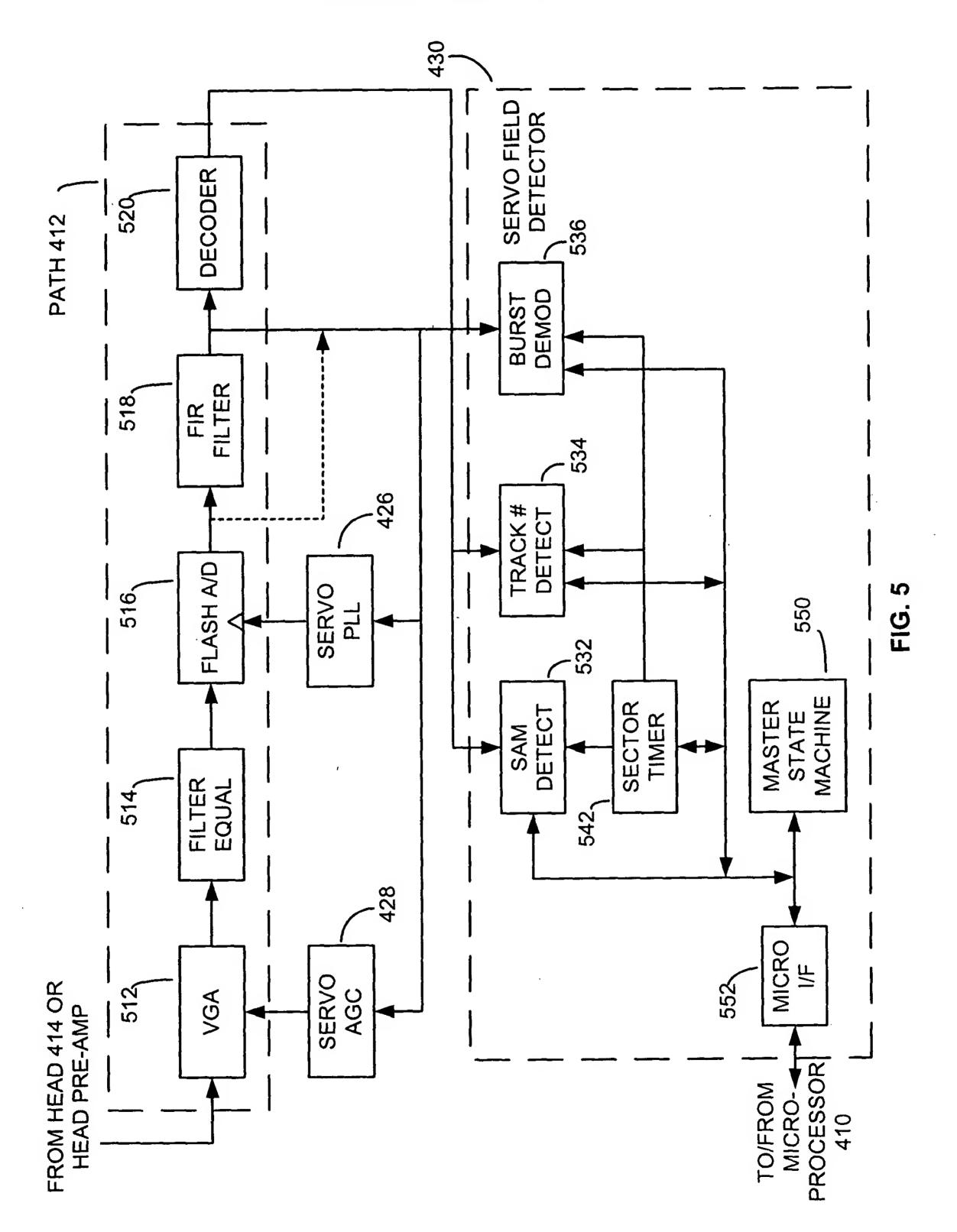
FIG. 1

2/17





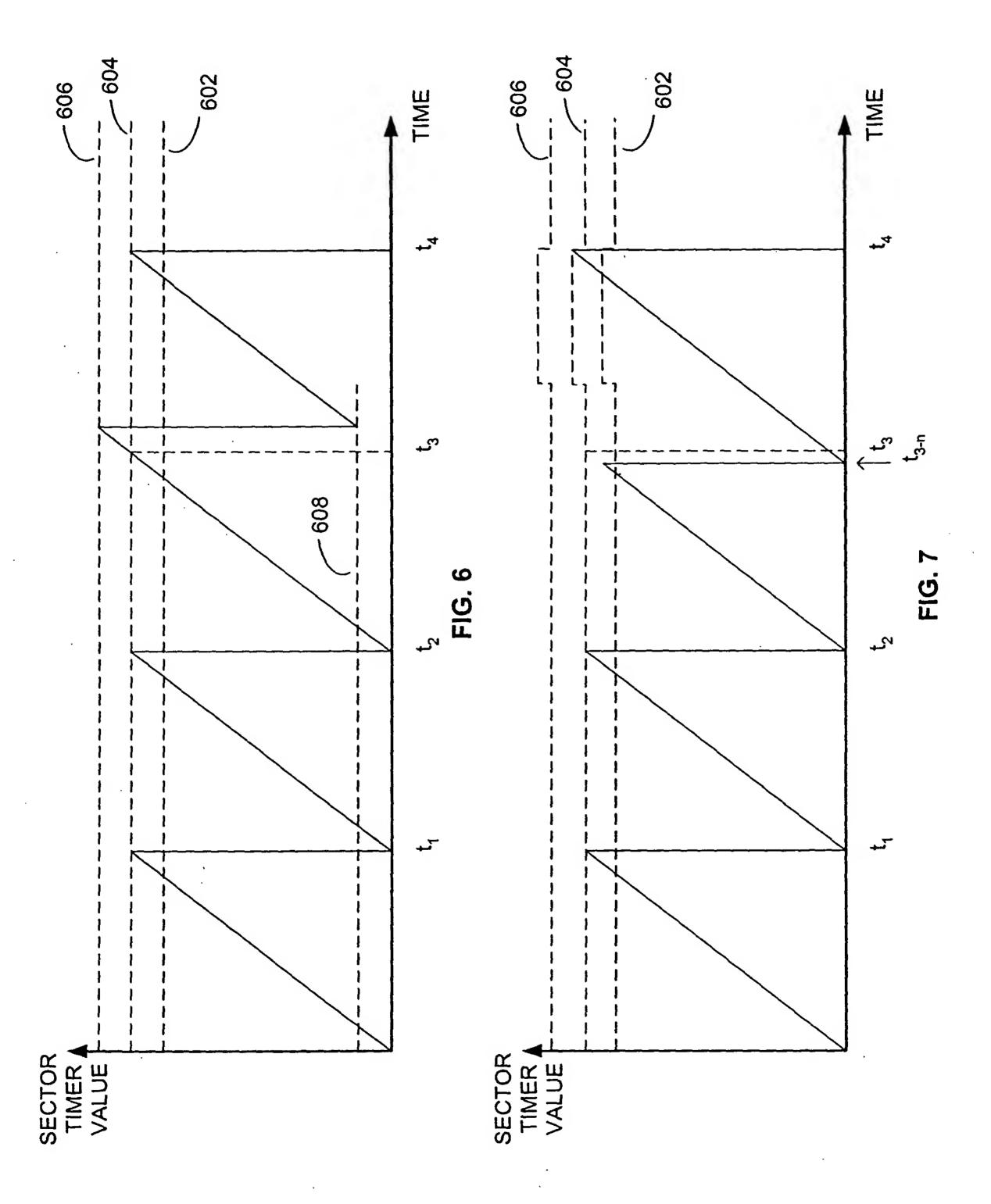
4/17

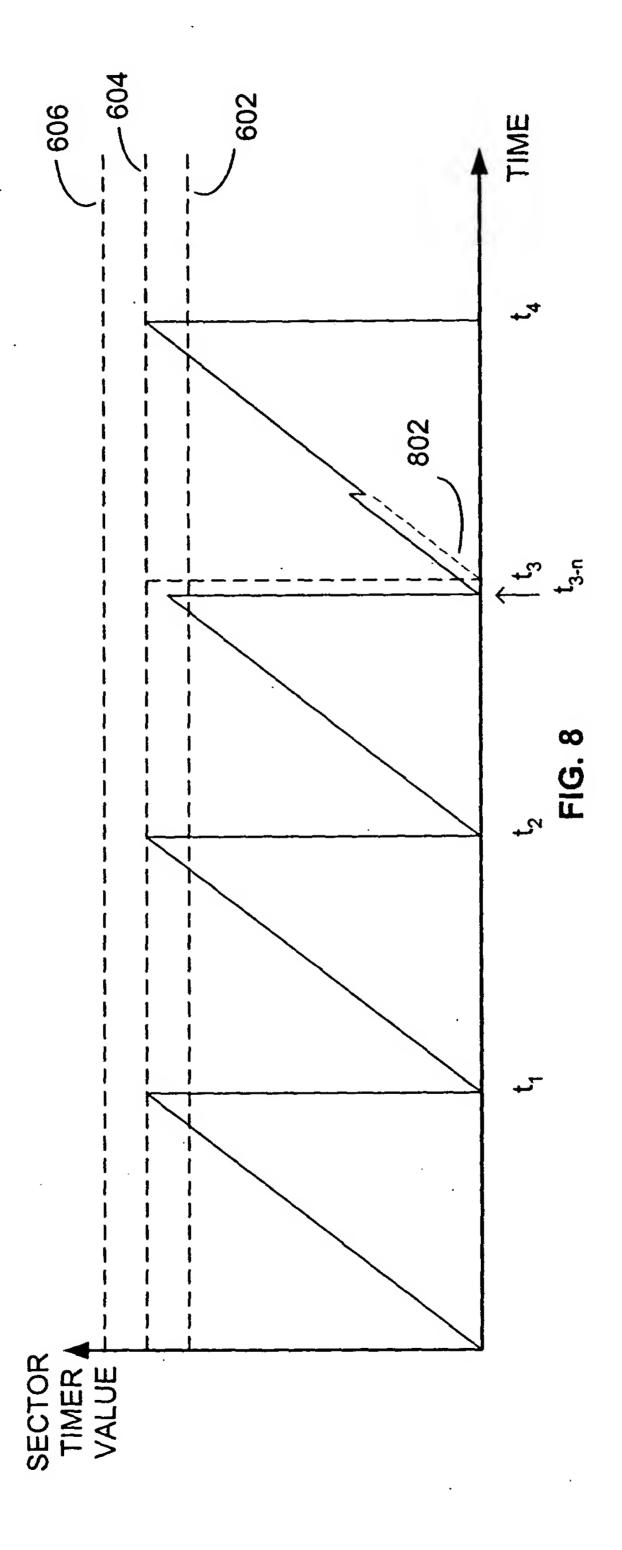


Title: Methods for Limiting Channel Control Values to

5/17

Thereby Improve Servo-Demodulation Robustness





Inventor: Richard M. Ehrlich 7/17 Docket No.: PANA-01046USD 902 determine one or more predicted servo demodulation values for a next servo wedge 904 search for the SAM pattern in the next servo wedge 916-906 perform further servo functions, no detect the SAM pattern? taking into account no detection of the SAM pattern, e.g. free-wheel yes 908 determine one or more actual servo demodulation values for the servo wedge 910 characterize the detection of the SAM pattern as a good SAM detection or a bad SAM detection 918-.912 perform further servo functions, no good SAM detection? taking into account the bad SAM detection characterization yes 914 perform further servo functions, taking into account the good SAM detection characterization

Title: Methods for Limiting Channel Control Values to

Thereby Improve Servo-Demodulation Robustness

FIG. 9

8/17

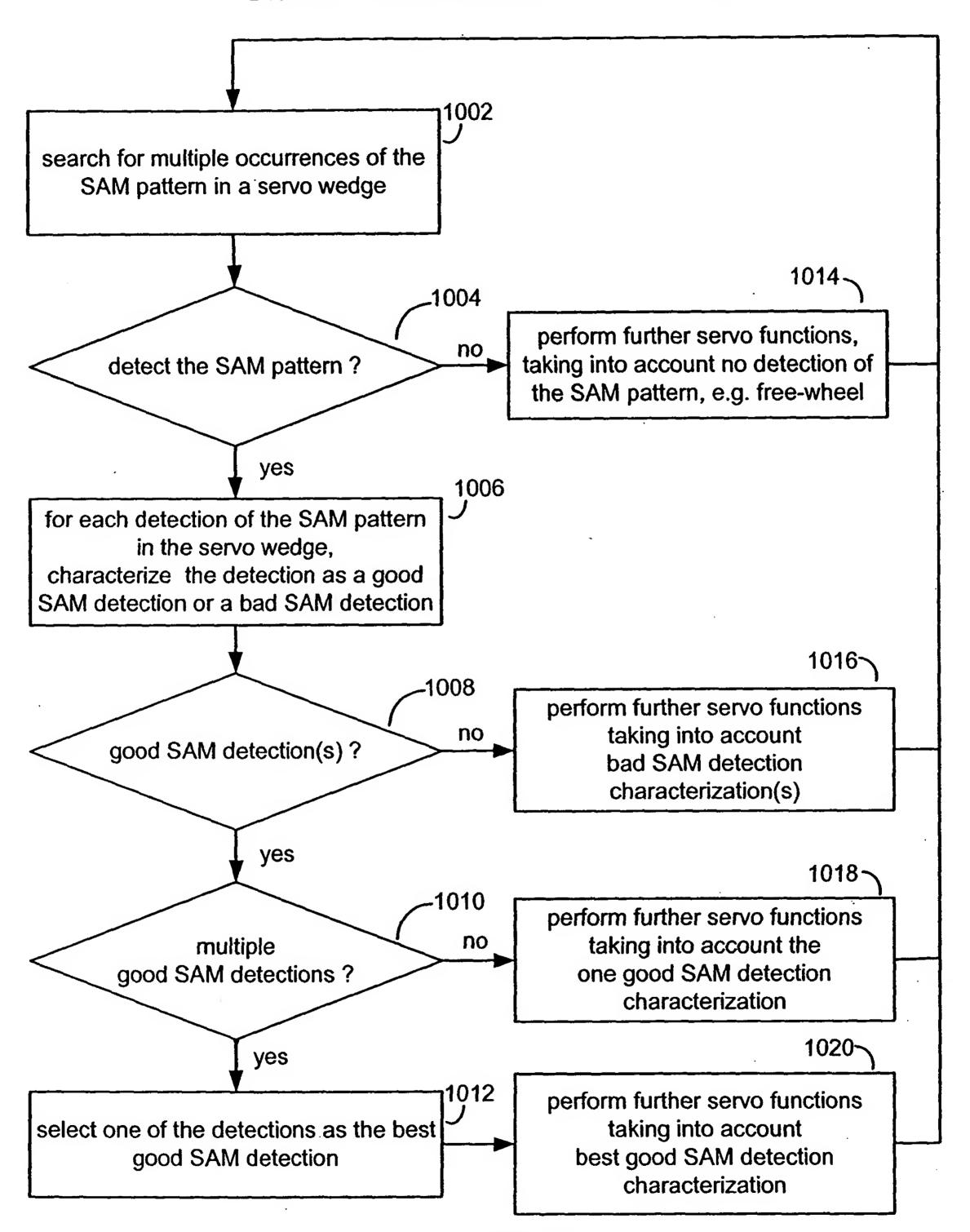


FIG. 10

Thereby Improve Servo-Demodulation Robustness Inventor: Richard M. Ehrlich 9/17 Docket No.: PANA-01046USD 1102 search for the SAM pattern in a servo wedge 1112-.1104 select at least one previously stored channel control value as, or to no predict, a starting channel control detect the SAM pattern? value for use when beginning to read a next servo wedge yes 1106 characterize the detection as a good SAM detection or a bad SAM detection 1108 no good SAM detection? 1114 1110 yes select at least one channel control store at least one channel control value value stored at step 1110 as, or to (e.g., servo AGC value and/or servo predict, a starting channel control PLL value) associated with the servo value for use when beginning to wedge read a next servo wedge

Title: Methods for Limiting Channel Control Values to

FIG. 11A

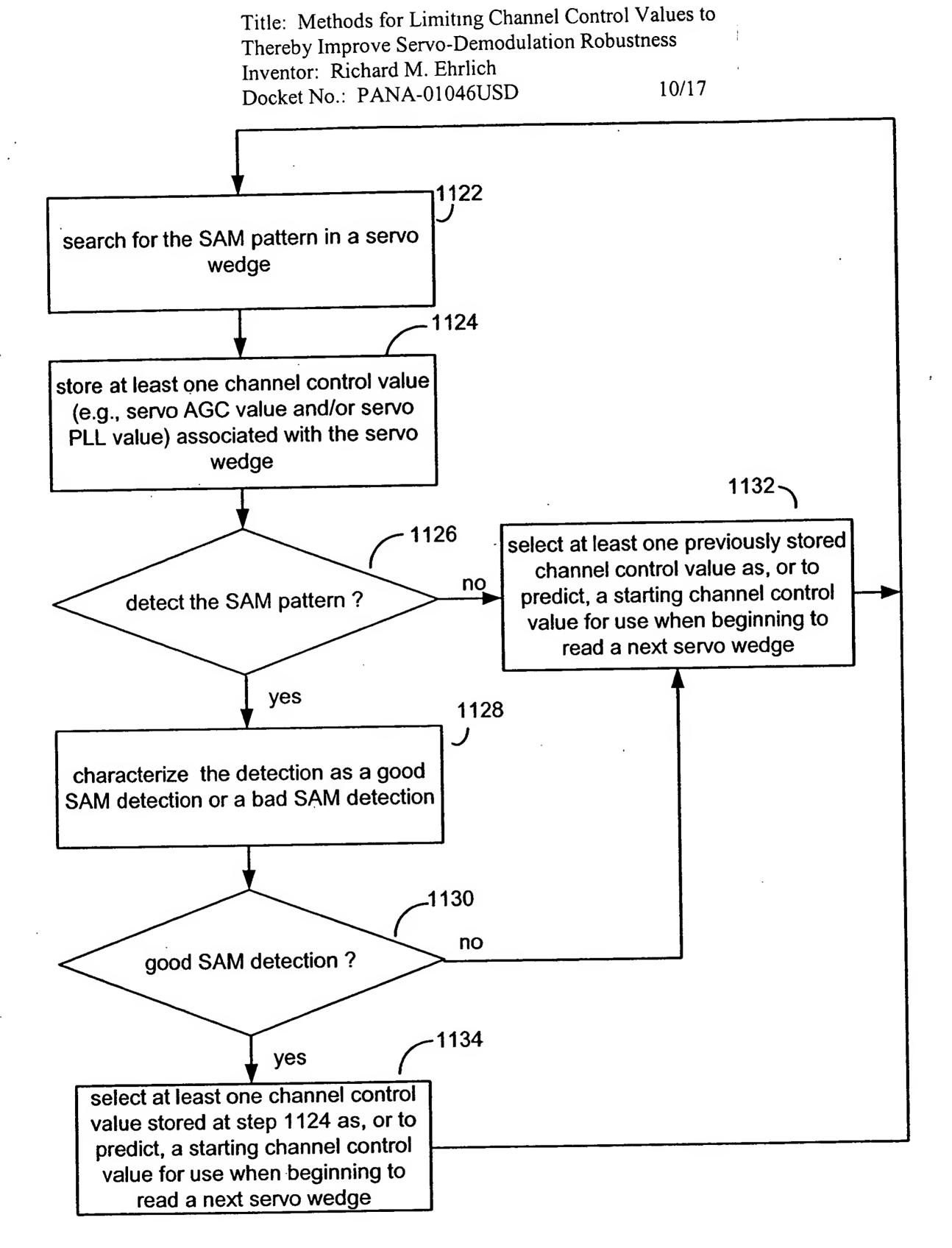


FIG. 11B

Inventor: Richard M. Ehrlich

Docket No.: PANA-01046USD 11/17

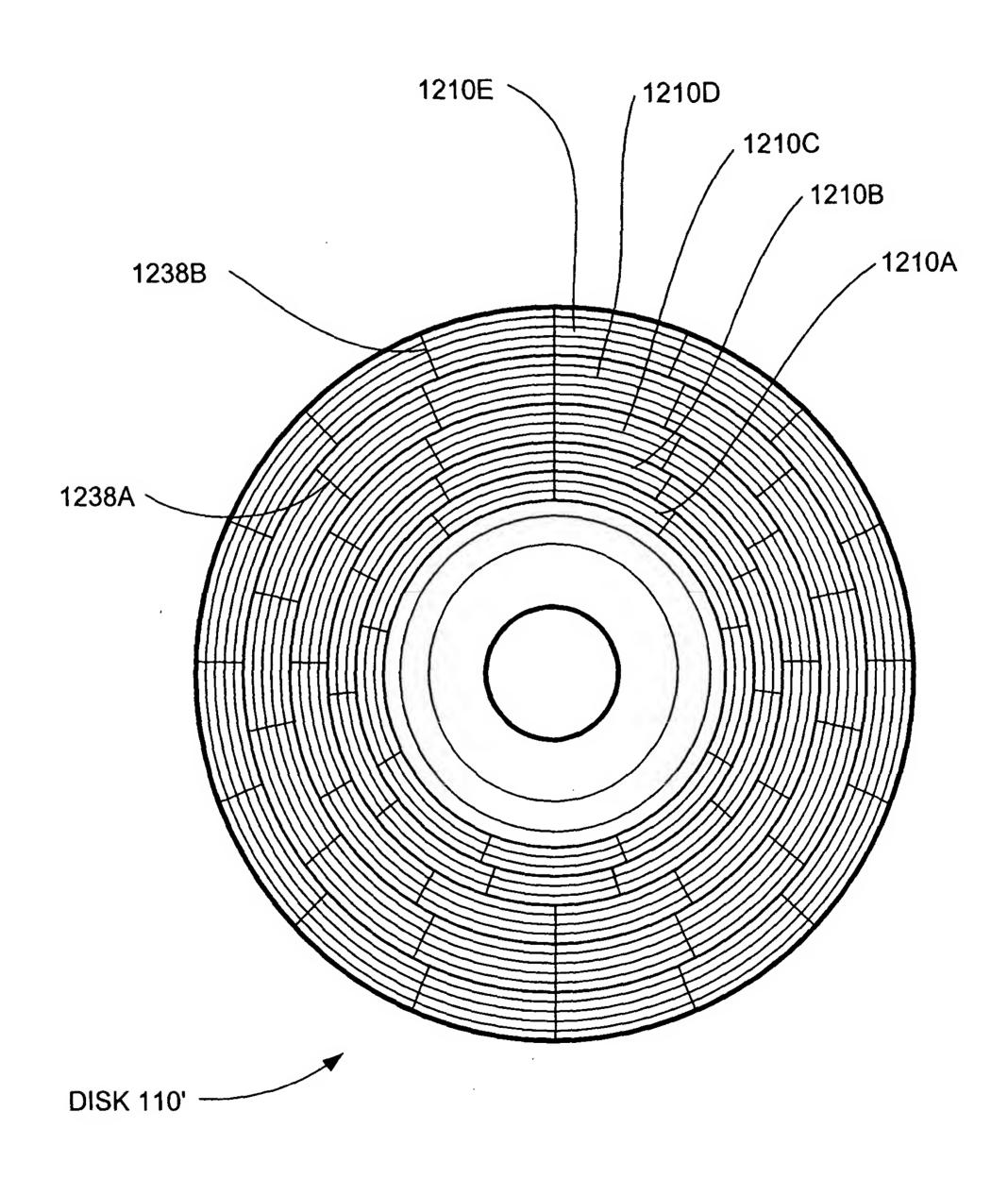
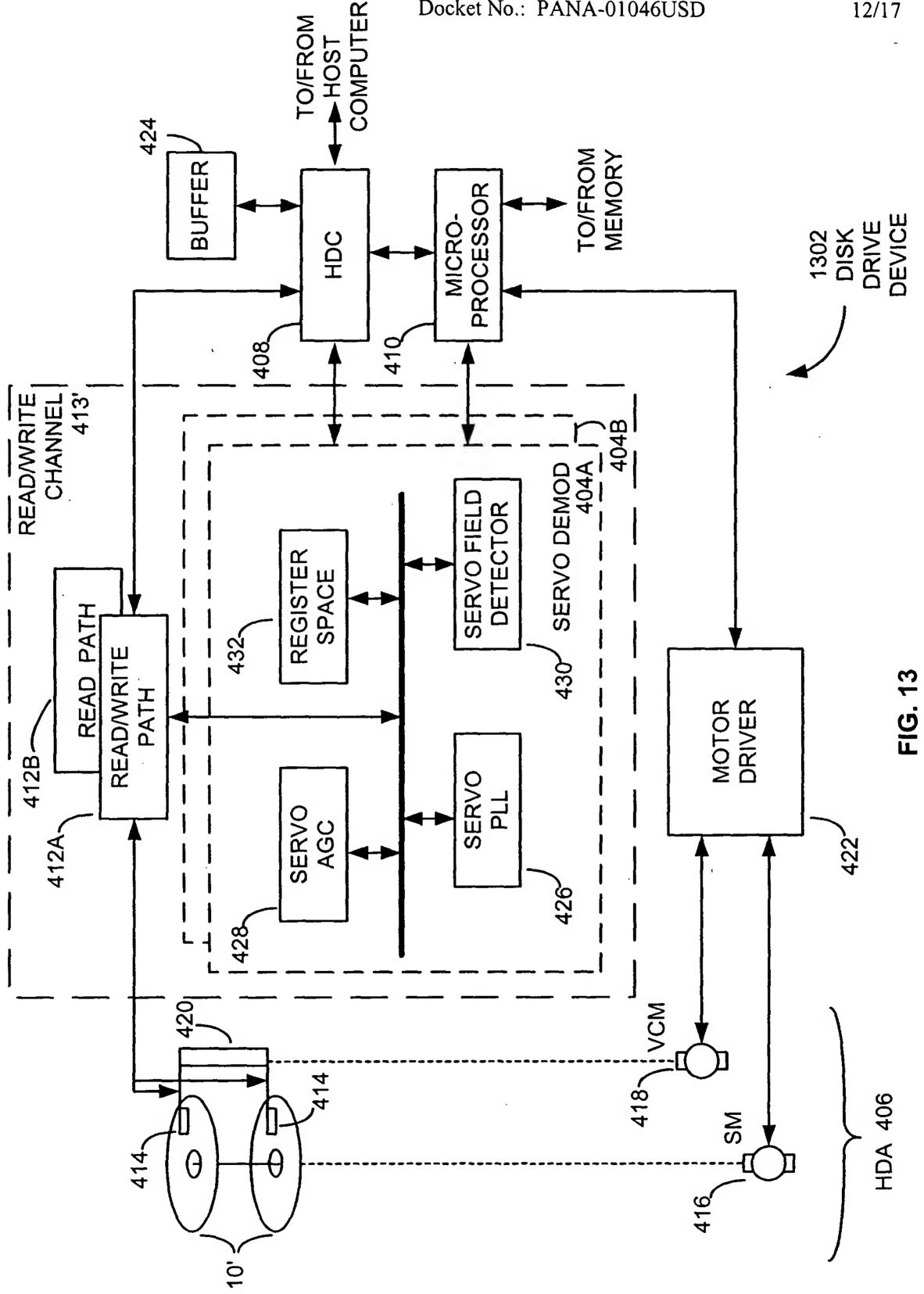
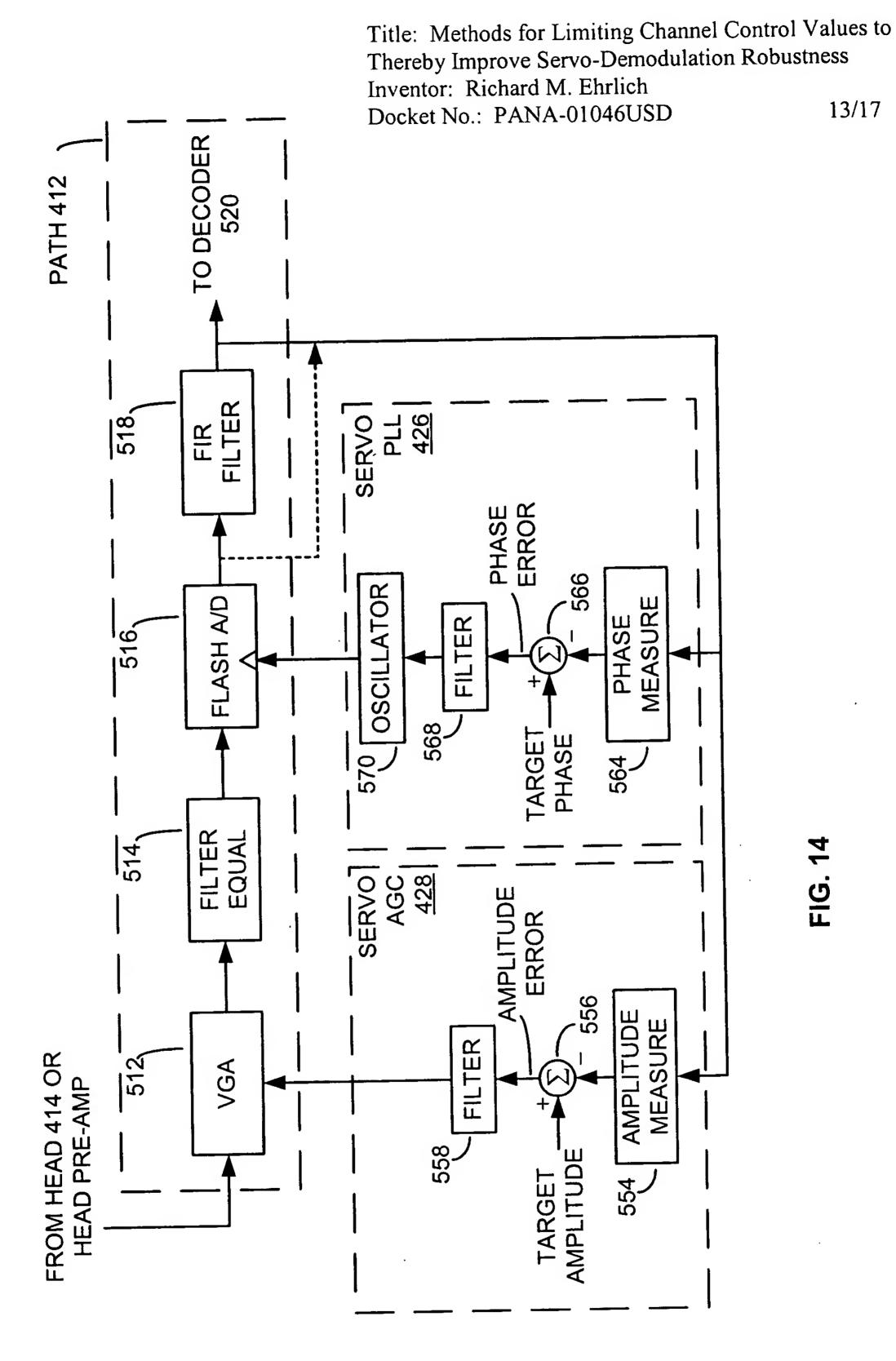


FIG. 12

Title: Methods for Limiting Channel Control Values to Thereby Improve Servo-Demodulation Robustness Inventor: Richard M. Ehrlich Docket No.: PANA-01046USD 12/17 TO/FROM MEMORY **PROCESSOR** 1302 DISK DRIVE DEVICE MICRO-SERVO DEMOD 1 | 404A | 1 | 404B SERVO FIELD DETECTOR 430 FIG. 13 MOTOR DRIVER SERVO PLL VCM 418





Inventor: Richard M. Ehrlich
Docket No.: PANA-01046USD 14/17

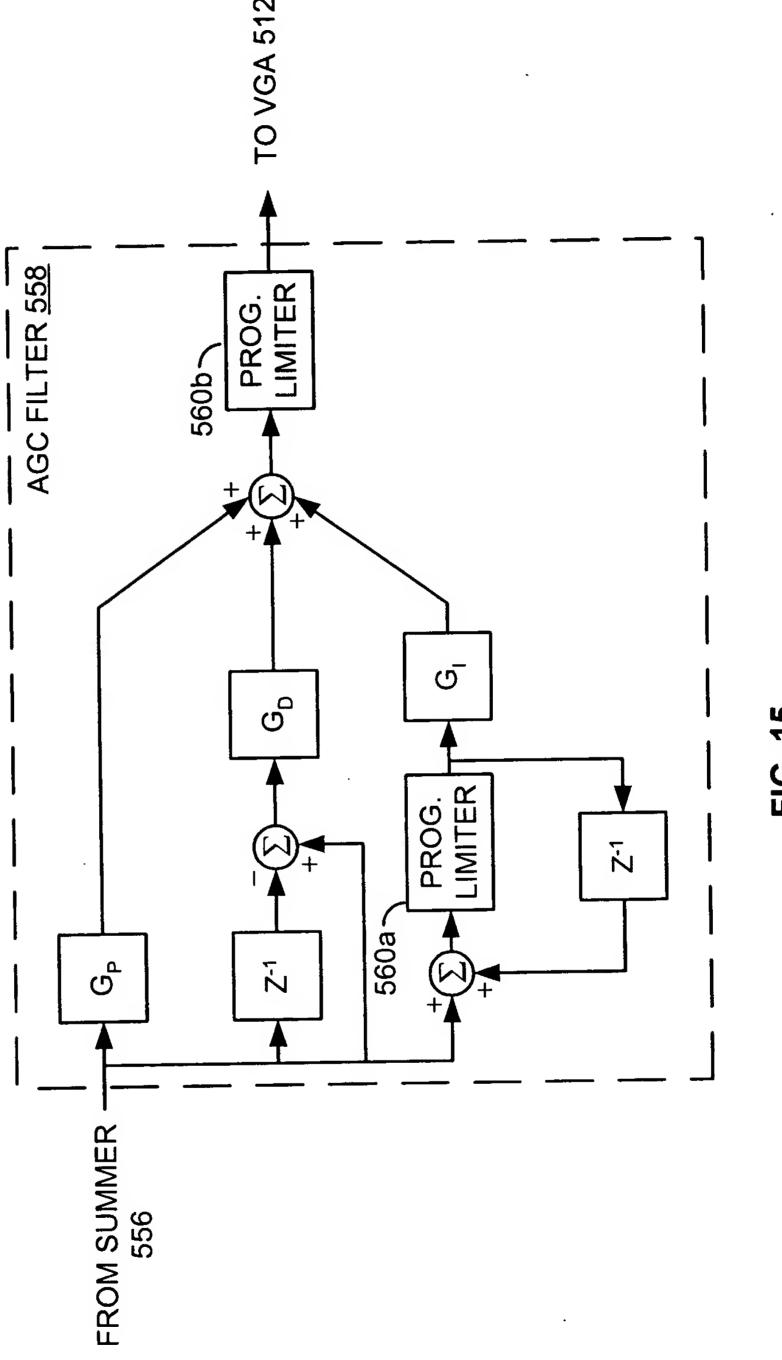
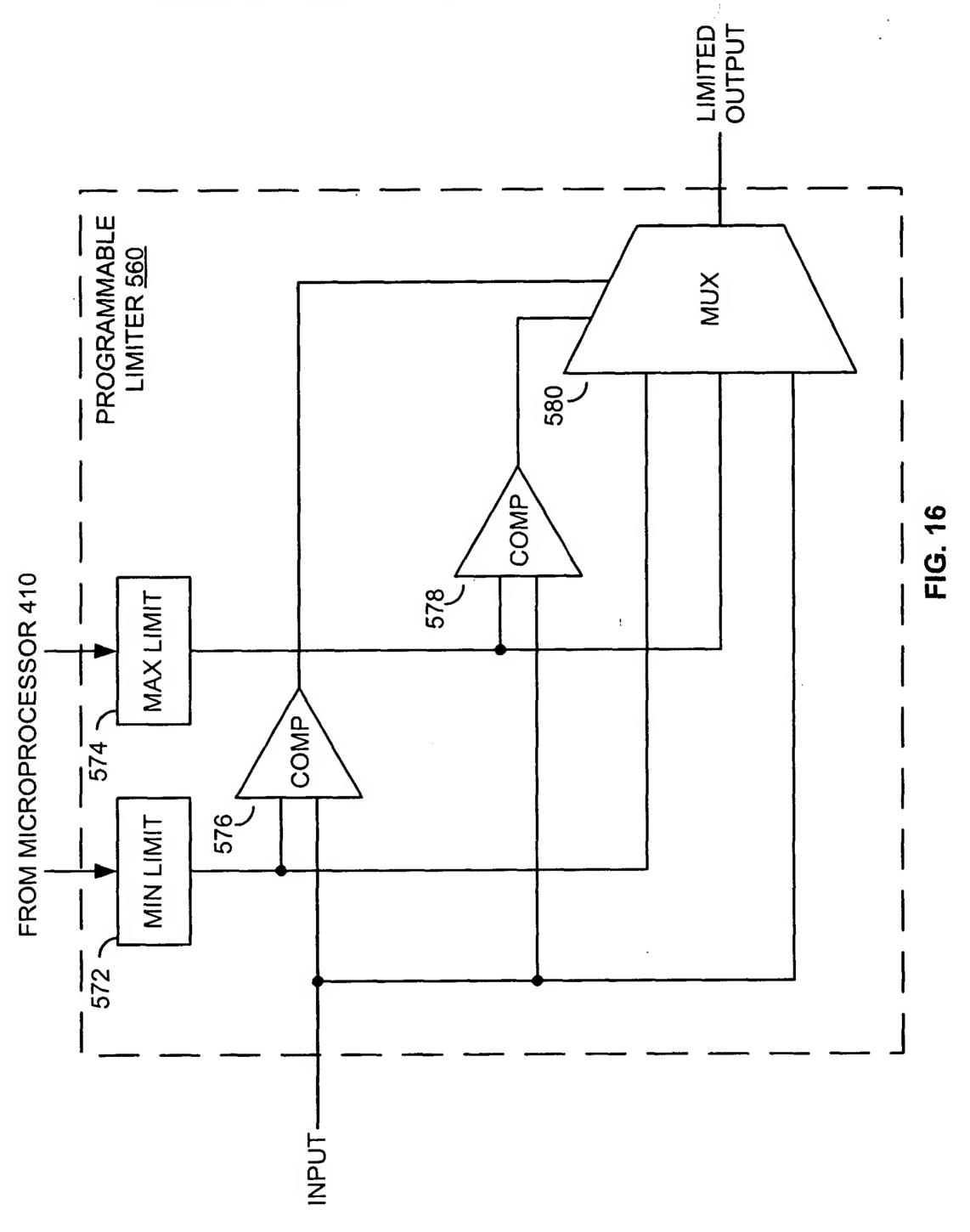


FIG. 15



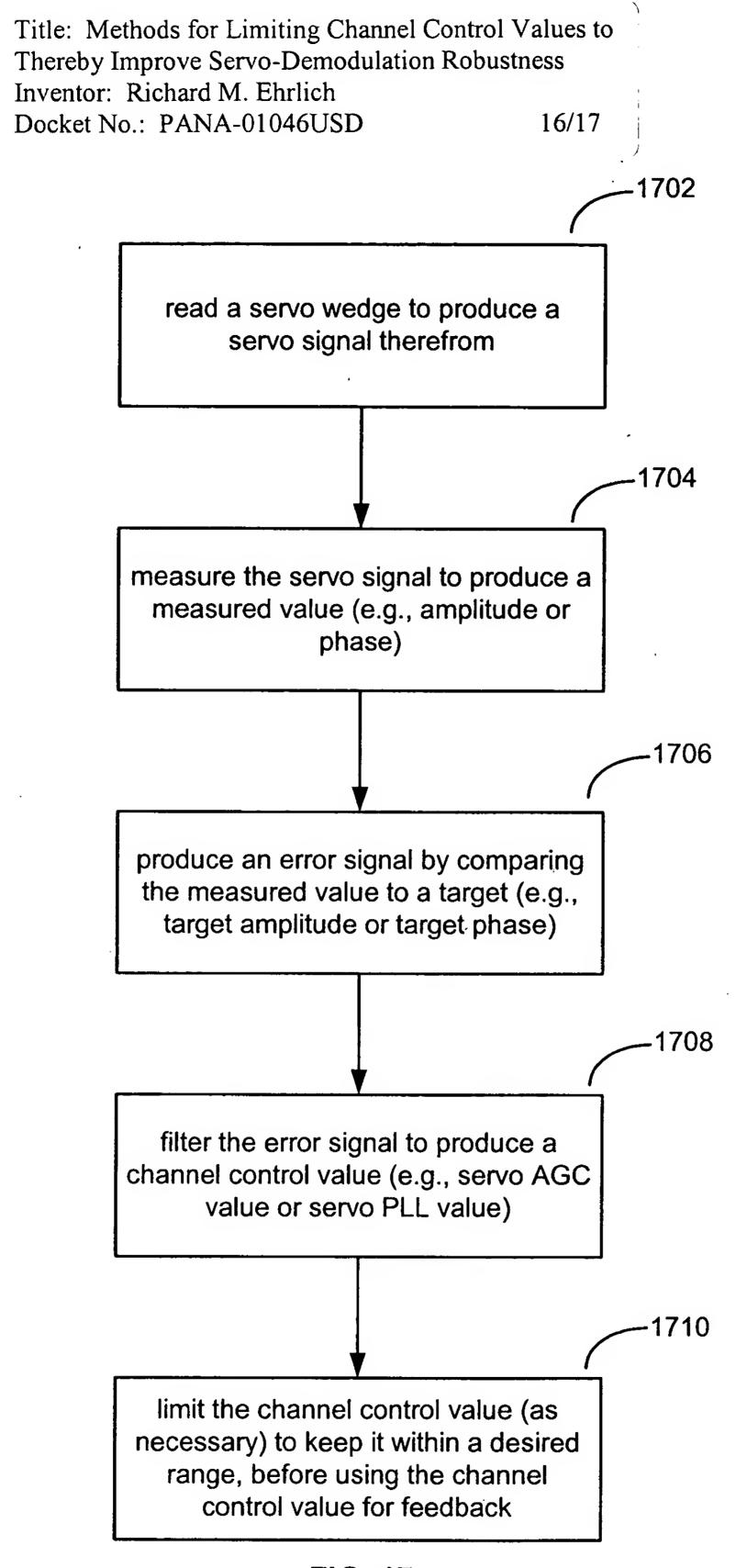


FIG. 17

17/17

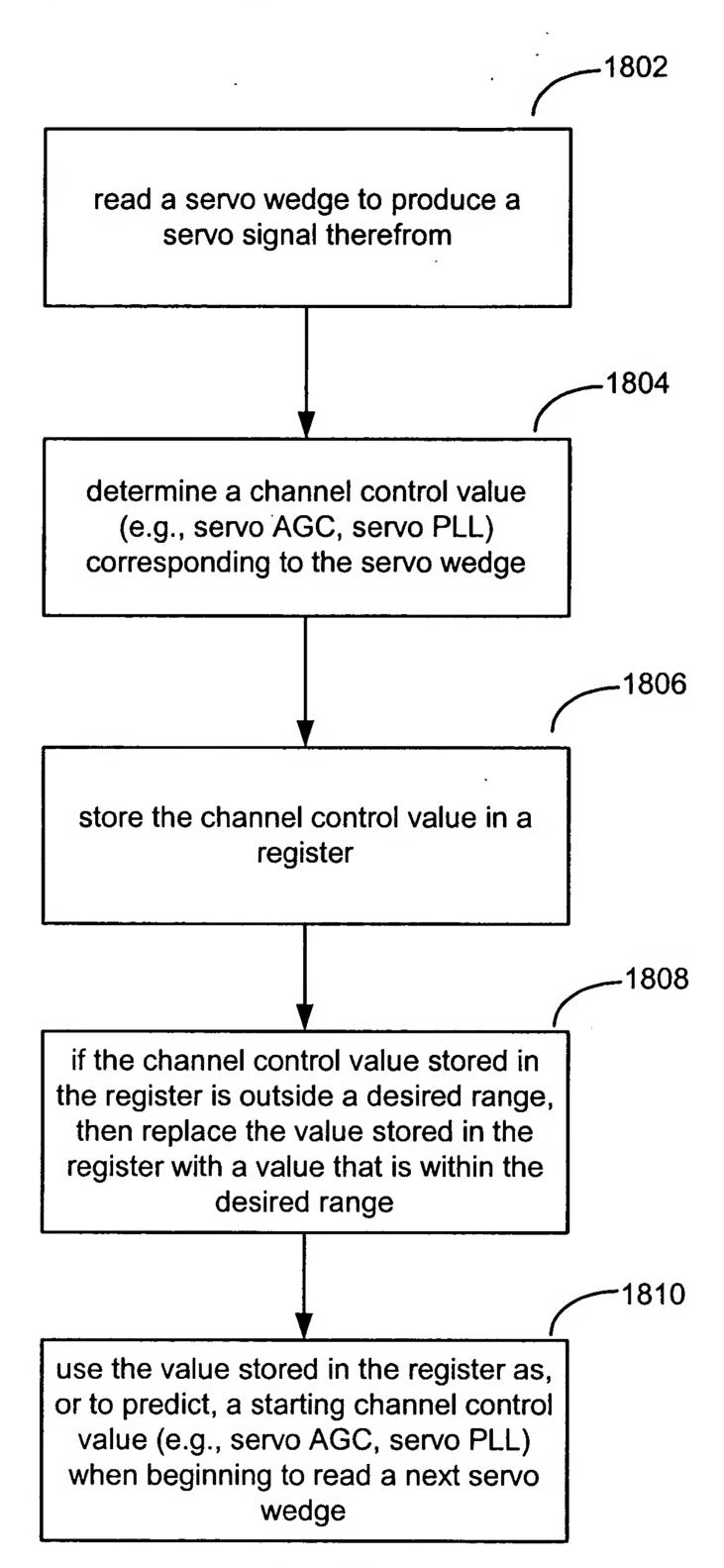


FIG. 18